

HEMATITE FUEL FABRICATION FACILITY
Building 110
(Main Office Building)
3300 State Road P
Festus
Jefferson County
Missouri

HAER No. MO-113-B

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD

Midwest Regional Office
National Park Service
601 Riverfront Drive
Omaha, Nebraska 68102

HISTORIC AMERICAN ENGINEERING RECORD

HEMATITE FUEL FABRICATION FACILITY BUILDING 110 (Main Office Building)

HAER No. MO-113-B

- Location:** 3300 State Road P
Festus, Jefferson County, Missouri
- Present Owner:** Westinghouse Electric Company Limited Liability Corporation (LLC).
- Present Use:** Security entrance to Facility and conference area for consultants.
- Significance:** The Hematite Fuel Fabrication Facility, also known as Hematite Former Fuel Cycle Facility and the Westinghouse Electric Company Hematite Facility, was constructed over a period of thirty-one years. The Facility was the first privately owned and operated uranium fuel production plant in the United States. The plant produced nuclear fuel for military as well as peacetime purposes throughout the “Cold War” era.
- The Hematite Fuel Fabrication Facility produced high-enriched nuclear fuel for the U.S. Navy nuclear submarine program and other reactor programs during the “Cold War” years of 1956 to 1974. After 1974 the Facility produced only commercial grade low enriched uranium for commercial nuclear power facilities.

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PART I. HISTORICAL INFORMATION

A. Physical History

- 1. Date of Construction:** 1970
- 2. Architect:** The architect for this building is unknown.
- 3. Owners, Occupants and Uses:** Owners include: Owners include: Mallinckrodt Chemical Works, United Nuclear Corporation, Gulf United Nuclear Fuels Corporation, Combustion Engineering Corporation, Asa Brown Boveri, and Westinghouse Electric Company, LLC. Building 110 became the pedestrian entrance into the plant. Upon entering there is a guard stationed at the counter, through a door on the left of the guard station is office and meeting space on the perimeter of the building and a kitchen, reception area and restrooms.
- 4. Builder-Contractor:** The contractor is unknown.
- 5. Original Plans and Construction:** The original plans are in the possession of Westinghouse Electric Company, the location is unknown.
- 6. Alterations and Additions:** There have been no alterations or additions made to this building since its original construction in 1970.

B. Historical Context

Building 110 housed the administrative support staff for the Facility, this included managers, supervisors, security and secretarial staff.

PART II. ARCHITECTURAL INFORMATION

A. General Statement

- 1. Architectural character:** Building 110 is a one-story brick, front facing "L" plan building. The entry is surrounded by ceiling to floor length double pane windows. There is exterior lighting

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mounted on the brick face between each window. Architecturally the building can be described a modern office design.

2. **Condition of fabric:** Excellent condition.

B. Description of Exterior

1. **Overall dimensions:** This office area measures 85'-11" x 48'-9" and the entry/security area measures 20'-2 x 19'-4". Building 110 measures 4,594 total square feet.
2. **Foundation:** Reinforced concrete
3. **Walls:** Front and sides are brick and rear of building is vertical aluminum siding. At the foundation, one third of the way up the building from the ground, and at the very top of the wall is one soldier course layer in the brickwork.
4. **Structural system, framing:**
5. **Porches:** Concrete patio at rear of building
6. **Chimneys:** There are no chimneys.
7. **Openings:**
 - a. **Doorways and doors:** Three doors provide access to the building. The building is entered from the north, through a glass door. To enter the facility grounds, employees and visitors check in with security and exit to the Facility through a glass door on the south. The office area is exited from the emergency exit door at the rear (east) of the building.
 - b. **Windows:** There are sixteen windows symmetrically spaced.

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8. Roof:

- a. Shape, covering:** Flat, the roof has a high, vinyl-sided parapet on three sides and is open at the rear of the building.
- b. Cornice, eaves:** There are no cornices or eaves.
- c. Dormers, cupolas, towers:** There are no dormers, cupolas or towers.

C. Description of Interior

- 1. Floor plans:** Enclosed offices and conference rooms are located on the north and south exterior walls. Each office and conference room has an exterior window and an interior sidelight window. The center of the administrative area houses a reception area, kitchen and restrooms.
- 2. Stairways:** There are no stairways.
- 3. Flooring:** Carpet
- 4. Wall and ceiling finish:** Interior walls are drywall with wallpaper covering, and the ceiling consists of a drop ceiling.
- 5. Openings:** There are thirteen openings in Building 110. There is a door leading into the office from the security area. There are eight doors leading into private offices. One door leads into a conference room, doors provides access to restrooms and the final opening has no door and provides access to the kitchen area located in the center of the building.
- 6. Decorative features:** There are no decorative features.
- 7. Hardware:** All hardware is modern.

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8. Mechanical equipment:

- a. Heating, air conditioning, ventilation:** Building 110 has a modern forced air heating and cooling system.
- b. Lighting:** Recessed fluorescent lighting mounted in the drop ceiling.
- c. Plumbing:** Modern plumbing system.

- 9. Furnishings:** The building houses modern office equipment that includes desks and chairs. The reception area features cubicles and built-in counters used as work space. The kitchen is modern with all modern appliances, including stove, refrigerator, and sink.

D. Site

- 1. General setting and orientation:** Building 110 is a stand-alone building, it is entered from the north into the security station. The south end of the building exits into the fenced Facility.
- 2. Historic landscape design:** Vernacular landscape design.

PART III. SOURCES OF INFORMATION

- A. Architectural drawings:** The original plans are currently held by Westinghouse Electric Company Limited Liability Corporation (LLC).

B. Bibliography:

Bucher, Ward, ed. *Dictionary of Building Preservation*. New York: John Wiley & Sons, Inc., 1996.

Malich, Phillip J. *034-JE-02 Proposed Hematite Former Fuel Processing Facility*. Missouri Department of Natural Resources, State Historic Preservation Office, Jefferson City, Missouri, 2002.

McAlester, Virginia and Lee McAlester. *A Field Guide to American Houses*. New York: Alfred A. Knopf, 1997.

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PART IV. PROJECT INFORMATION

This Historic American Engineering Record (HAER) documentation project was undertaken due to the owner's desire to decommission the Facility. The Facility will be disassembled (this is being done for safety purposes and the work is being done in accordance with federal law and regulations regarding hazardous waste clean-up and disposal). In 2003, Westinghouse Electric Company, LLC, hired SCI Engineering, Inc., of St. Charles, Missouri, to complete the HAER documentation of the Hematite Fuel Fabrication Facility. Dr. Steve Dasovich supervised the project and Historian Colleen Small-Vollman authored the HAER documentation report. The report was compiled by Susan Sheppard. Bruce Meyer and Todd Kapler completed the photographic documentation of the Facility, and Asa Westphal completed the floor plan drawings.